Risk Communication: Reducing the Risk of Foodborne Illness

February 22, 2001

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Where are we in risk communication?

Usage of Existentially Validated Information

Verified data (knowledge)

Processed Data (information)

Mere Data



Health for the public good

Informed opinion and active cooperation on the part of the public are of the utmost importance in the improvement of health of the people.

World Health Organization
Preamble to the Constitution

OUR public

- The mouse is a little human
- If it is not natural is must be bad
- The plural form of the word anecdote is evidence

How do we diffuse risk scientifically?

- Public health usual ideas:
 - The data speak for themselves
 - Surveillance sets the agenda
 - Indicators set policy objectives

General Stereotypes of Health and Risk Communication

 Health communicators try to figure out how to warn people about serious hazards (e.g. cigarette smoking)

 Risk communicators try to figure out how to reassure people about modest hazards (e.g. vaccine safety, electromagnetic fields, etc.)

What is a science based approach to risk communication?

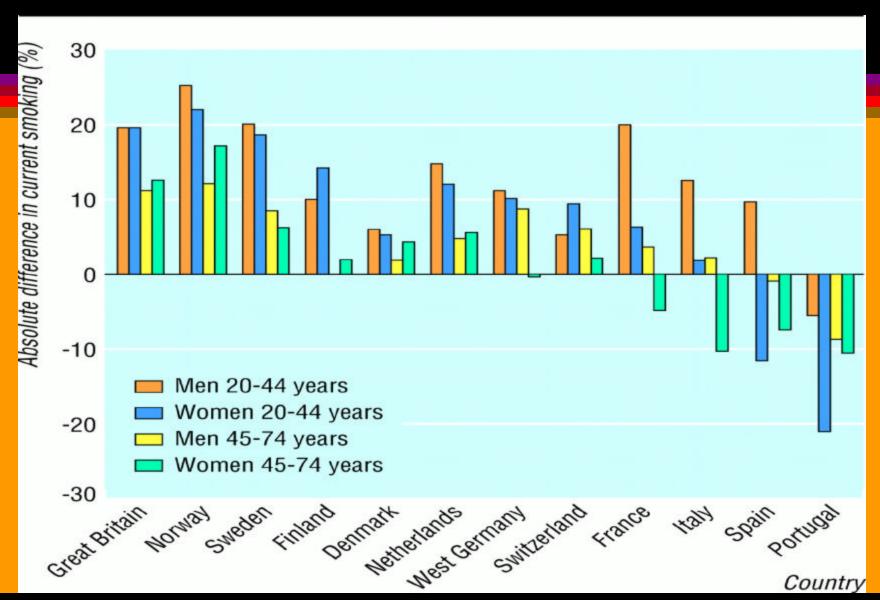
- Adds VALUE from the intervention
- Bases decisions on SOUND SCIENCE and EVIDENCE
- Develops opportune OPINION LEADERSHIP
- Involves Policymakers, Physicians, Patients and the Public in PARTNERSHIP

Challenges of health and risk communication

- GM foods
- Biotechnology
- New pills
- Natural vs. synthetic
- Tobacco cessation
- Theoretical/hypothetical/neglible risk

Are we looking at the right variables for our audience?

Educational Level and Smoking -- Europe



Cavelaars AE, et.al. Educational differences in smoking: international comparison. BMJ. 2000 Apr 22;320(7242):1102-7.

Lessons from tobacco: Health reasons alone are not motivational

- Health arguments have not made people stop
- Socio-cultural vs. personal the guilt comes from 'not doing the right thing', social determinants help develop true personal desire
 - -- Resentment towards personal freedom continues
- 'It will not happen to me' syndrome, invincible nature: 'How is it possible that non-smokers also get cancer? So smoking does not cause cancer?'
- Serious medical problems and saliency changes behavior

Emotions are the loudest in health and risk communication

- Slogans and programs do not motivate in isolation
- •The psychology of giving up (urge and willpower) must be exceeded by the near term benefit of stopping smoking (control, feeling good, beating disease, etc.)
- It is more difficult to motivate with long-term benefits
- Health and risk communication are about FRAMING issues

Risk Communication Kakistocracy: Lessons from Bovine Spongiform Encephalopathy (BSE)

"The biggest crisis the European Union ever had" Franz Fischler, European Commissioner for Agriculture

"The worst crisis the British Government has faced since the Falklands" John Major

"If one wanted to study the perils of imperfect policy-making, this case provides them all."

The Guardian

Back cover of *The Mad Cow Crisis: Health and the Public Good* (S. Ratzan, Editor) University College London Press; NYU Press, 1998)

BSE in the UK; a Background Lessons from News Coverage

- November 1986 newly recognized form of neurological disease appears in cattle - BSE
- June, 1988 known to public Mad cow disease
- March 20, 1996 cluster of 15 cases of new variant CJD released by SEAC .. "in the absence of any credible alternative, the most likely explanation at present is that these cases are linked to exposure to BSE"
- March 24, 1996 McDonalds bans beef
- EU ban...British boycott EU.....
- 2001 Global concerns and ad hoc policies

BSE- Bovine Spongiform Encephalopathy

Key scientific question:

How widely was the agent transmitted before and during the crisis? Have hundreds, thousands, or even millions of mostly British victims going to emerge in the years to come as vCJD's?

BSE- Bovine Spongiform Encephalopathy A public health tragedy in reverse

Key policy question:

 Are the precautions taken so far in the UK, the EU, the USA, and elsewhere sufficient to ensure that no or virtually no additional transmissions are even now occurring?

BSE-The response

- Killing of herds
- More studies without any confirmed vector identified
- Erosion of governmental trust
- Public uncertainty questioning of decisions on health (vaccines, GMOs, pill, etc.)

In the UK:

The Science: How did the original 16 or now 80+ people get vCJD?

There is **no scientific proof** that BSE can be transmitted to man by beef, but this is seen by SEAC as the most likely explanation, and all our control measures are based on the assumption that it is.

[Official Report, 9 March 1999; Vol. 327, c. 86W.]

CONFIDENCE in UK -- 1996 IF THEY MADE A STATEMENT ABOUT BSE

In whom would you have

| most confidence? | next most confi | dence? least conf | least confidence? | |
|--|-----------------|-------------------|-------------------|--|
| | % | % | % | |
| A scientist in a government department | 4.6 | 11.3 | 26.4 | |
| A scientist in a consumer organization | 18.0 | 35.4 | 1.5 | |
| A scientist in a university | 42.0 | 23.0 | 0.5 | |
| A scientist in the meat industry | 26.7 | 8.8 | 13.5 | |
| A scientist writing in a newspaper | 0.9 | 10.1 | 2.4 | |
| A journalist writing in a newspaper | 0.4 | 1.1 | 52.0 | |
| (None of these) | 4.5 | 2.0 | 1.0 | |
| (Don't Know) | 2.3 | 3.0 | 2.1 | |
| (Refusal/NA) | 0.6 | 5.2 | 0.6 | |

Consequence of 1996: TRUST 1999

For each, do you generally trust them to tell the truth or not?

| | Tell Truth | Not tell truth | Don't know |
|-------------------------------|------------|----------------|------------|
| | % | % | % |
| Doctors | 89 | 8 | 3 |
| Teachers | 88 | 7 | 5 |
| Clergymen or priests | 86 | 9 | 5 |
| Television news readers | 75 | 17 | 8 |
| The Police | 70 | 23 | 7 |
| Ordinary wo/man in the street | 58 | 26 | 16 |
| Civil servants | 52 | 35 | 13 |
| Trade Union Officials | 40 | 39 | 21 |
| Government Scientists | 38 | 46 | 16 |
| Business leaders | 35 | 49 | 16 |
| Politicians generally | 19 | 73 | 8 |
| Government Ministers | 17 | 71 | 12 |
| Journalists | 10 | 82 | 8 |

Source: Better Regulation Task Force/MORI 9-19 January 1999. Base: 1,015 adults aged 16+.

Consequence of 1996: Who to believe 1999

"Now thinking about BSE, which two or three of these sources would you trust most to advise you on the risks posed by BSE?"

| Independent Scientists (e.g. university professors) | 57 |
|---|----|
| Farmers | 22 |
| National Farmers Union | 21 |
| Civil Servants at the Ministry of Agriculture, Fisheries and Food | 18 |
| Government Scientists | 17 |
| Television | 16 |
| Newspapers | 12 |
| Food Manufacturers | 11 |
| Friends/family | 9 |
| Supermarkets | 6 |
| Government Ministers | 4 |
| Politicians generally | 2 |
| Other | 1 |
| None of these | 4 |
| Don't know | 3 |

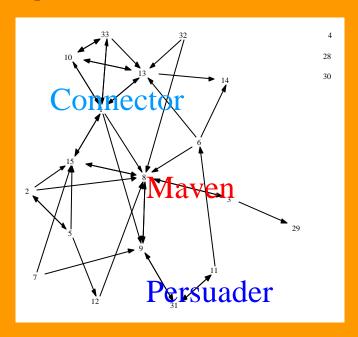
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Effective Communication

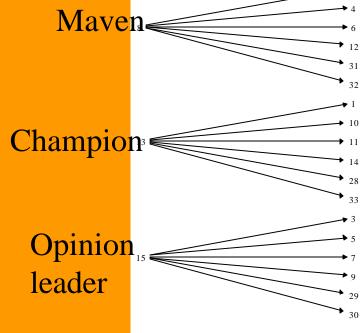
The right information/message to the right people (targeting) at the right time for the intended effect

Proactive Dissemination Communication with Sociometric science

Usual community with mavens, persuaders and connectors



The Maven/Champion/Opinion leader has his/her own networks



Ideal Risk Communication

• Identify
partners with
and develop a
relationship
activating
groups to reach
the best decision
(devolution of
decisions)



Strategic Partnerships



Behavior vs. Social Change: Where does communication influence?



Final Points

- •Arguing that we must offer aggressive scientific reassurance related to risk issues is not reassuring. Hence, suggesting such a strategy is not scientific.
- Do we need to look at new ways of adding a literacy related to risk? A risk competence?
- How well trained are we in communicating risk related to food safety?